

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of

Verizon Request for Declaratory Ruling,  
or, in the Alternative, for Partial Waiver,  
Regarding the Handset Locking Rule for  
C Block Licensees

WT Docket No. 06-150

**REPLY COMMENTS OF DOUBLE PERFECT**

Pursuant to the *Public Notice* released by the Wireless Telecommunications Bureau on March 5, 2019, Double Perfect hereby submits the following reply comments on the device locking proposal Verizon previewed on September 11, 2018<sup>1</sup> and submitted to the Commission on February 22, 2019.<sup>2</sup>

**I. THE HANDSET LOCKING PROHIBITION UNAMBIGUOUSLY PROHIBITS HANDSET LOCKING. THUS, THE COMMISSION SHOULD NOT ISSUE A DECLARATORY RULING PERMITTING HANDSET LOCKING.**

The majority of commenters recognize that the handset locking prohibition set forth by the C Block Rules<sup>3</sup> unambiguously prohibits handset locking.<sup>4</sup>

*Handset locking prohibited.* No licensee may disable features on handsets it

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- 1 Kellen Barranger, <https://www.droid-life.com/2018/09/11/verizons-new-device-unlock-policy-will-lock-phones-for-60-days-or-life-of-payment-plans/> (“Theft is not the only reason for the change, though. Verizon also states that phones purchased on device payment plans could be subject to SIM locks for the entire term of the sales agreement.... To recap, Verizon plans to lock phones for a minimum of 60 days post purchase.”)
- 2 “Verizon” includes Cellco Partnership & Affiliated Entities d/b/a Verizon Wireless.
- 3 “C Block” refers to spectrum in the Upper 700 MHz Band C Block.
- 4 Comments of Pine Belt Cellular, Inc. (“Pine Belt”) at 3–4 (April 4, 2019) [“Here, there is no controversy or uncertainty. Section 27.16(e) is clear on its face.”] Comments of Public Knowledge at 1–6 (April 4, 2019) (“First, the language of the relevant Rule is not ambiguous.”) Comments of T-Mobile USA, Inc. (“T-Mobile”) at 2–3 (April 4, 2019) (“Verizon claims that the Commission should issue a declaratory ruling to resolve ‘ambiguity,’ but there is no ambiguity either in the rules or the Commission’s intent.”) (internal citation omitted)

provides to customers, to the extent such features are compliant with the licensee's standards pursuant to paragraph (b) of this section, nor configure handsets it provides to prohibit use of such handsets on other providers' networks.<sup>5</sup>

Other parts of the *700 MHz Second Report and Order*<sup>6</sup> and Section 27.16 of the Commission's rules rely on a broader definition of "customer" that recognizes wireless device users are customers of multiple parties, including device manufacturers, application providers, and wireless service providers.<sup>7</sup> Pine Belt and Public Knowledge reject Verizon's claims about ambiguity,<sup>8</sup> and T-Mobile calls out Verizon's limited definition of "customer"<sup>9</sup> as an invention not based on anything in the C Block Rules:

Similarly, despite Verizon's assertions, there is no ambiguity in the word "customer" in the rules. Verizon creates that ambiguity by inventing a new category of "legitimate customer," not based on anything in Section 27.16, nor in

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5 47 CFR §27.16(e)

6 *Service Rules for the 698–746, 747–762 and 777–792 MHz Bands et al.*; Second Report and Order; 22 FCC Rcd. 15289 (2007)

7 Comments of Pine Belt at 3–4 ('As explained more thoroughly below, the Commission adopted the handset locking rule in the hopes of "implement[ing] pro-consumer concepts" and encourag[ing] innovation in network devices and applications.'") Comments of Public Knowledge at 4 ('In the Second Report & Order, the Commission has stated that it believes that "the open platform requirement for devices and applications ... will make it easier for customers, device manufacturers, third-party application developers, and others to use or develop devices and applications made by small entities on the network of the C Block licensee.'')

8 Comments of Pine Belt at 3–4. Comments of Public Knowledge at 2 ('The language of the Rule, and the language of the adopting Order, make the meaning of customer and application of the "Open Device" Rule perfectly clear.') and 3 ('Varying nuances of a definitional meaning in the Rule may be argued if there were an ambiguity in the meaning. However, the meaning of "customer" and "configure" are not ambiguous, as argued by Verizon, because the open device condition is clear in its intent, general meaning, and interpretation as applied to its licensees.')

9 *Verizon Request for Declaratory Ruling, or, in the Alternative, for Partial Waiver* at 13 (February 22, 2019) (*Verizon Petition*) (Verizon calls on the Commission to 'limit the definition of "customer" to someone "responsible for payment" in the context of wireless services and handsets' and declare that the C Block Rules don't apply to customers until after a waiting period—60 days, in Verizon's current proposal—expires.)

the *700 MHz Order*'s discussion of device locking.<sup>10</sup>

Limiting the definition of “customer” would not only impact the handset locking prohibition but also limit the other customer protections in the C Block Rules.<sup>11</sup>

This plain language is further supported both by the language of the Second Report and Order and the individual Commissioner statements. The open device condition is a statement of principle that sets down a marker for promoting competition in the device and application market. If the Commission granted Verizon's request, then the open device principles that were adopted by the Commission would be compromised.<sup>12</sup>

For example, the handset locking prohibition is one half of Rule 27.16(e); the other half prohibits licensees from disabling features on handsets they provide to customers. Clearly, the Commission should not permit licensees to disable features for 60 days (or any other period of time).

By definition, locking handsets, temporarily or otherwise, configures them to prohibit use on other providers' networks, and despite Verizon's claims to the contrary, a 60-day handset lock is a handset lock. T-Mobile notes the *700 MHz Second Report and Order* does not permit or even contemplate temporary locking.<sup>13</sup> The *Report and Order* set forth only two exceptions to the handset locking prohibition: “reasonable network management” and compliance with applicable regulatory requirements:

Wireless service providers subject to this requirement will not be allowed to

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<sup>10</sup> Comments of T-Mobile at 3

<sup>11</sup> Comments of Pine Belt at 3–4. Comments of Public Knowledge at 2 (‘The language of the Rule, and the language of the adopting Order, make the meaning of customer and application of the “Open Device” Rule perfectly clear.’) and 3 (‘Varying nuances of a definitional meaning in the Rule may be argued if there were an ambiguity in the meaning. However, the meaning of “customer” and “configure” are not ambiguous, as argued by Verizon, because the open device condition is clear in its intent, general meaning, and interpretation as applied to its licensees.’)

<sup>12</sup> Comments of Public Knowledge at 4 (internal citation omitted)

<sup>13</sup> Comments of T-Mobile at 3

disable features or functionality in handsets where such action is not related to reasonable network management and protection, or compliance with applicable regulatory requirements. For example, providers may not “lock” handsets to prevent their transfer from one system to another.<sup>14</sup>

Locking handsets is a choice motivated by a business justification, not a technical network management justification (*e.g.*, alleviating network congestion), and no regulation requires Verizon to lock handsets.

Public Knowledge reiterates that Verizon’s handset locking proposal will prohibit legitimate customers from using their handsets on other providers’ networks until after a waiting period (60 days, in Verizon’s current proposal) expires and that the handset locking prohibition unambiguously prohibits handset locking for any length of time:

Even under Verizon’s definition, there is no doubt that “legitimate” customers – the overwhelming majority of customers – will have their phones locked to the network for 60 days in direct violation of the plain language of the Open Device Rule.

[...]

As discussed above, the plain language and supporting statements of the Commissioners make it crystal clear that any mechanism used to lock the handset to the network for any length of time, for any reason, violates the Rule.<sup>15</sup>

Because the handset locking prohibition unambiguously prohibits handset locking, the Commission should not issue a declaratory ruling permitting handset locking.

## **II. WAIVER SUPPORTERS HAVE NOT SHOWN PERMITTING LICENSEES TO LOCK CUSTOMERS’ HANDSETS WOULD BENEFIT CUSTOMERS OR OUTWEIGH THE NEGATIVE EFFECTS TO INVESTMENT, INNOVATION, AND COMPETITION.**

Similarly, the majority of commenters oppose waiving the customer protections in the C Block Rules and concur with the Commission’s finding in the *700 MHz Second Report and*

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<sup>14</sup> *700 MHz Second Report and Order* at 15370-15371 ¶ 222 (internal citation omitted)

<sup>15</sup> Comments of Public Knowledge at 3–4 and 5–6

*Order* that on balance, bright-line openness rules provide more investment, innovation, and competition benefits to *all* customers, device manufacturers, application providers, and wireless service providers than equivocal rules. The *Report and Order* noted Verizon's claims about handset locking and fraud<sup>16</sup> but also recognized Columbia Public Law Research Paper No. 07-154,3 which notes 'Verizon Wireless originally justified crippling Bluetooth on its telephones as a means of preventing "fraud" and virus infections.'<sup>17</sup> After security experts like Jonathan Zdziarski (currently at Apple) scrutinized Verizon's unsubstantiated claims<sup>18</sup> and customers sued, Verizon admitted it crippled Bluetooth to prohibit customers from downloading applications from providers other than Verizon's commercial partners.<sup>19</sup>

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16 700 MHz *Second Report and Order* note 430

17 Sascha Segan, *Motorola V710 Review & Rating*, <https://www.pcmag.com/article2/0,2817,1639783,00.asp> ('But Verizon disabled the phone's Bluetooth file-transfer function, so you can't wirelessly transfer photos to your PC without using the carrier's for-pay Pix Messaging service. Verizon also disabled the built-in Bluetooth Serial Port function, so you have to buy a \$39.99 USB cable to sync the phone with your PC. ... But even with the USB cable, you can't get photos off the phone or transfer files between the phone and your PC. Verizon says that crippling Bluetooth implementation is a "fraud prevention" tactic to prevent strangers from sending unsolicited text messages to your phone. Whatever.')

18 Jonathan A. Zdziarski, *The Motorola v710: Verizon's New Crippled Phone*, <https://web.archive.org/web/20060703041009/http://www.nuclearelephant.com/papers/v710.html> ['What Security Issue? I had heard this story from Verizon, which was that they were investigating security issues with the phone, but this appeared only to be an afterthought in comparison with Verizon's profitability needs. The story didn't appear to hold water, and I got the feeling she understood that. Bluetooth has some basic front-line security designed to prevent someone from arbitrarily transferring files to/from the phone without performing a "bonding" ritual. On top of this, the v710 sports a "stealth mode" where it will remain invisible from discovery unless the owner specifically makes it visible (at 60-second intervals) so there's little chance a stranger will even know it's there let alone have the MAC address.']

19 Shelley Solheim, <https://www.eweek.com/mobile/verizon-wireless-users-sue-over-disabled-bluetooth-features> ("The v710 includes Get It Now, our virtual mall of games and productivity tools that customers can download. The agreements we have with our content providers preclude our allowing anyone to download these applications beyond the phone. The open architecture of Bluetooth could also allow customers to download Get It Now applications beyond the phone," said Verizon Wireless spokesperson Brenda Raney.)

T-Mobile reiterates that the Commission voted to adopt the bright-line openness rules set forth by the *700 MHz Second Report and Order* after notice-and-comment rulemaking and notes that the Wireless Telecommunications Bureau cannot simply waive these rules when the result would be to eviscerate them.<sup>20</sup>

Pine Belt notes Verizon has not provided substantive data that shows permitting licensees to lock customers' handsets would benefit customers or outweigh the negative effects to investment, innovation, and competition:

While Verizon claims that its Petition for Partial Waiver requesting a 60-day handset locking period is itself in the public interest, the “benefits” that such a 60-day locking period would provide are far outweighed by the public benefits that are derived from Verizon’s continued compliance with the handset locking rule, which the Commission previously determined in 2007 when Verizon made the same argument. Accordingly, Verizon has not proven that a grant of partial waiver of section 27.16(e) would actually be in the public interest. Its Petition for Partial Waiver should thus also be denied.

Indeed, Verizon provided only one monthly breakdown of handset fraud costs: a 2018-to-2019 estimate for January.<sup>21</sup> Appalachian Wireless invoked the opioid crisis and claimed various conclusions that one can “imagine” or that “many” of its employees can “believe.”<sup>22</sup> The paucity of substantive data provided by waiver supporters raises more questions than answers, including:

- Why now? Verizon raises this question<sup>23</sup> (and mentions that some devices now retail for \$1000 or more) but doesn’t provide a clear answer. To what extent are “expensive” phones a passing anomaly? In 2017, Apple introduced iPhone X with a starting price of \$999, but after price shock put downward pressure on sales, Apple

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20 Comments of T-Mobile at 3–5

21 *Verizon Petition* at 9

22 Comments of East Kentucky Network, LLC d/b/a Appalachian Wireless at 3 (April 4, 2019)

23 Ronan Dunne, <https://www.verizon.com/about/news/protecting-our-customers-identity-theft-and-fraud> (February 22, 2019) (“I know that some may question why we’re doing this and why now.”)

introduced iPhone XR with a starting price of \$749, which is consistent with premium smartphone prices over the past decade after adjusting for inflation. HTC, LG, Samsung, and other device providers have made similar moves.

- How does the temporal distribution of handset fraud look over the past decade?

Verizon didn't detail enough long-term data to infer much, but the carrier's estimates that fraud cost it \$18 million in January 2018<sup>24</sup> and \$190 million in all of 2018 show fraud in January 2018 was higher than the average for all of 2018. Assuming handset fraud costs are directly proportional to equipment revenue, data on equipment revenue reported to the Securities and Exchange Commission by carriers like Verizon and equipment makers like Apple suggest fraud is concentrated in December and January. To what extent can better data empower a comprehensive solution to the root problems of identity theft and fraud?

- How does the geographic distribution of handset fraud look over the past decade?

Neither Appalachian Wireless (a regional carrier) nor Verizon (a national carrier) provided any relevant data. To what extent is progress against the opioid crisis in various regions of the country contributing to progress against fraud? "Expensive" phones are available in other countries, including countries like Canada that prohibit all carriers from locking handsets. How do these countries manage to protect customers from identity theft and fraud?

Verizon says its device locking proposal will protect customers and itself from identity theft and fraud,<sup>25</sup> but unfortunately, Verizon's device locking proposal won't protect customers

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24 *Verizon Petition* at 9 ("These trends continue, as handset fraud cost Verizon \$34 million in January 2019, a 93 percent increase over January 2018.")

25 *Id.* at 1

from identity theft and won't prevent fraudsters from using other people's money to buy a \$999 phone from Verizon, a \$999 phone from an independent retailer that doesn't lock devices, or a \$1,999 notebook computer that isn't designed to allow an Internet service provider to lock it.

Instead of waiving the customer protections in the C Block Rules, the FCC should defer to the FTC. The Federal Trade Commission is the appropriate federal agency to address the root problems recognized by Verizon: identity theft and fraud.<sup>26</sup> The growing prevalence of "SIM swap"-enabled fraud shows that Verizon and other carriers need to invest more to protect customers and avoid becoming enablers of fraud.<sup>27</sup> Fortunately, Verizon and other carriers can choose to become part of a comprehensive solution to the root problems of identity theft and fraud that protects not only Verizon but also customers.

Finally, among other things, the Commission should note that Verizon and AT&T recently colluded to cripple eSIM technology:

AT&T and Verizon together control about 70 percent of all wireless subscriptions in the United States. A technology that made it easy to switch carriers could lead to more turnover and fewer subscribers for them....

After the formal complaints against AT&T and Verizon were filed, several device makers and other wireless companies voiced similar concerns to the agency about the carriers' actions around eSIM, four people familiar with the investigation said.

"The actions would limit choice for consumers and harm competition," said Ferras Vinh, a policy expert at the Center for Democracy and Technology.<sup>28</sup>

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26 Similarly, other agencies at the federal, state, and local level can better address the opioid crisis.

27 Brian Krebs, <https://krebsonsecurity.com/2018/11/busting-sim-swappers-and-sim-swap-myths/> ('More importantly, he says, the frequency of SIM swapping attacks is...well, off the hook right now. "It's probably REACT's highest priority at the moment, given that SIM swapping is actively happening to someone probably even as we speak right now," Tarazi said.')

28 Cecilia Kang, *U.S. Investigating AT&T and Verizon Over Wireless Collusion Claim*, <https://www.nytimes.com/2018/04/20/technology/att-verizon-investigate-esim.html>



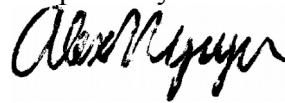
And in spite of the C Block Rules, Verizon is currently disabling eSIM technology in devices like Apple iPads and Google Pixel smartphones the carrier provides to customers.<sup>29</sup>

Because waiver supporters have not shown permitting licensees to lock customers' handsets would benefit customers or outweigh the negative effects to investment, innovation, and competition, the Commission should not waive the C Block license conditions.

### III. CONCLUSION

The Commission should not issue a declaratory ruling or waive the C Block license conditions.

Respectfully submitted,



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April 19, 2019

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29 Ina Fried, <https://www.recode.net/2016/3/22/11587182/latest-ipad-pro-makes-it-even-easier-to-switch-wireless-carriers> ("T-Mobile and Sprint are fully supporting the built-in Apple SIM feature. AT&T, however, will tie the Apple SIM to its network if you buy your iPad at one of its retail stores. Verizon, meanwhile, will require a separate SIM card and disable the built-in embedded Apple SIM on the iPads it sells.") *Disabled eSIM on Pixel 3 devices*, <https://www.reddit.com/r/verizon/comments/a73ckj/> ("Verizon has done the same thing to my 2018 iPad Pro. The eSim is disabled and it shipped with a Verizon SIM card in it. There's no way to ever enable the eSim. Verizon sucks.")